

WHAT IS CLAIMED IS:

1. An electromagnetic switch for a starter comprising:
  - a bobbin;
  - a plate-like terminal having a first end and a second end, the first end being attached to the bobbin in an axial direction of the bobbin;
  - an excitation coil wound around the bobbin, an end of the excitation coil being pulled out the bobbin and connected to the terminal; and
  - a cover mounted on the terminal, wherein the terminal passes through the cover in the axial direction.
2. The electromagnetic switch as in claim 1, wherein the bobbin has a first flange and a second flange, and the first flange has a terminal holder that protrudes from the first flange in the axial direction and defines a slot on an axial end surface to receive the first end of the terminal.
3. The electromagnetic switch as in claim 2, wherein the terminal holder provides longitudinal walls protruding in the axial direction on both side of the slot.
4. The electromagnetic switch as in claim 2, wherein the terminal holder defines a slit to hold the excitation coil pulled out of the bobbin.
5. The electromagnetic switch as in claim 1, wherein the

terminal provides an arm portion to fasten the end of the excitation coil.

6. The electromagnetic switch as in claim 1, wherein the end of the excitation coil is welded to the terminal.

7. The electromagnetic switch as in claim 1, wherein the first end of the terminal has a serrated portion.

8. The electromagnetic switch as in claim 1, wherein the cover defines a through hole to provide the terminal pass through.

9. The electromagnetic switch as in claim 1, further comprising a sealing member to seal between the cover and the terminal.

10. The electromagnetic switch as in claim 9, wherein the sealing member has a ring-shape and is press-fitted on the terminal.

11. The electromagnetic switch as in claim 9, wherein the sealing member has a projection on an outer periphery.

12. The electromagnetic switch as in claim 2, wherein the terminal holder is one of a pair of terminal holders that are located on the first flange and spaced apart from each other.

13. The electromagnetic switch as in claim 2, wherein the terminal holder provides a wall portion protruding in the axial direction along the terminal for restricting the terminal from moving in a thickness direction of the terminal.

14. The electromagnetic switch as in claim 1, further comprising:

a plunger which is slidably provided in the bobbin in the axial direction and attracted in one way by magnetic force generated in the excitation coil;

a rod slidable in the bobbin in the axial direction with the plunger, the rod defining an annular groove on an outer circumferential surface and having a first end and a second end opposite to each other, the first end opposing the plunger; and

a rod cover fitted on the rod and having a flange, a cylindrical part and a distal end opposite to the flange, the cylindrical part having a plurality of projections which project inwardly from an inner circumferential surface of the cylindrical part, are arranged in a circumferential direction, and are fitted in the annular groove, and the cylindrical part defining a plurality of slits each of which extends in the axial direction between the plurality of projections without reaching the distal end.

15. The electromagnetic switch for the starter according to claim 14, wherein an axial length of the cylindrical part from

the plurality of projections to the distal end is substantially equal to an axial length of the rod from the annular groove to the first end.